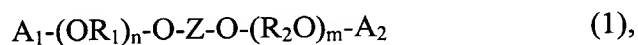


IN THE CLAIMS

✓
Please cancel Claims 1-16.

Please add the following new claims.

R.126 24
17. (New) A method comprising
sandwiching a mixture that comprises a liquid crystal and an uncured curable
compound between a pair of substrates, and
curing the uncured curable compound to form a liquid crystal/cured composite layer,
wherein the liquid crystal has a negative dielectric anisotropy, the mixture is free of a
chiral agent, the substrates have transparent electrodes, at least one substrate is transparent,
and the uncured curable compound comprises a compound of formula (1):



BA
wherein each of A_1 and A_2 , independently of each other, is an acryloyl group, a
methacryloyl group, a glycidyl group or an allyl group; each of R_1 and R_2 , independently of
each other, is a C_{2-6} alkylene group; Z is a bivalent mesogen structure; and each of n and m ,
independently of each other, is an integer of from 1 to 10.

25
18. (New) The method according to Claim 17, wherein each of the substrates
comprises a vertically orienting film.

26
19. (New) The method according to Claim 18, wherein the vertically orienting films
are polyimide films.

27
20. (New) The method according to Claim 19, wherein the polyimide films face one
another.

28
21. (New) The method according to Claim 17, wherein Z is a 4,4'-biphenylene group,
or a 4,4'-biphenylene group having some or all of the hydrogen atoms substituted by C_{1-2} alkyl
groups or halogen atoms.

²⁹
~~22.~~ (New) The method according to Claim 17, wherein each of R_1 and R_2 is an ethylene group or a propylene group.

³⁰
~~23.~~ (New) The method according to Claim 17, wherein each of A_1 and A_2 is an acryloyl group or a methacryloyl group.

³¹
~~24.~~ (New) The method according to Claim 17, wherein each of n and m is from 1 to 4.

³²
~~25.~~ (New) The method according to Claim 17, wherein the uncured curable compound comprises two compounds, and the molecular weight of one compound is twice the molecular weight of another compound.

³³
~~26.~~ (New) The method according to Claim 25, wherein the uncured curable compound comprises a compound having a mesogen structural portion and a curable compound containing no mesogen structural portion.

³⁴
~~27.~~ (New) The method according to Claim 25, wherein the two compounds have curable sites connectable to each other.

³⁵
~~28.~~ (New) The method according to Claim 25, wherein at least one of the compounds has a molecular weight of at least 1,000.

³⁶
~~29.~~ (New) The method according to Claim 17, wherein the mixture further comprises a curing catalyst.

³⁷
~~30.~~ (New) The method according to Claim 17, wherein the uncured curable compound comprises a plurality of compounds of formula (1) wherein n and m are different.

³⁸
~~31.~~ (New) The method according to Claim 17, wherein the uncured curable compound comprises at least one non-liquid crystalline compound.

³⁹
~~32.~~ (New) A light control element prepared by the method according to Claim 17.

BASIS FOR THE AMENDMENT

Claims 17-32 are active in the present application. Claims 17-32 are new claims. Claims 1-16 have been canceled. Support for new Claim 17 is found in original Claim 1. Support for the limitation that the liquid crystal has a negative dielectric anisotropy is found in Example 7. Support for the limitation that the mixture is free of a chiral agent is found in Examples 7 and 14. Support for new Claim 18 is found in the Examples. Support for new Claims 19-20 is found in Example 7. Support for new Claims 21-30 and 32 is found in the original claims. Support for new Claim 31 is found in the Examples wherein monomer species that are inherently non-liquid crystalline are described. The specification has been amended on page 9 to describe Figure 3. Support for the amendment is found on page 16, lines 1-4. The Table on page 29 has been amended to correct an obvious typographical error. Support for the amendment is found in the Examples. No new matter is believed to have been added by this amendment.

REMARKS

Applicants thank Examiner Sadula for the helpful and courteous discussion of June 6, 2003 with Applicants' U.S. representative. During the discussion, the Examiner indicated that a declaration submitted under 37 C.F.R. §1.132 may be sufficient for demonstrating that one or more of the monomers of formula (1) of original Claim 1 are non-liquid crystalline in nature.

Applicants have shown that a liquid crystal optical device prepared by a method wherein a chiral agent-free mixture containing a liquid crystal having a negative dielectric anisotropy and an uncured curable compound is sandwiched between substrates, is able to